

BECKER et al.

Appln. No.: 09/424,660

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rotating the first substrate with a rotary drive; and
controlling a thickness of the layer formed on the first substrate to a predetermined thickness by controlling at least one of the dosing pump, a position of the dosing arm with respect to the first substrate, and a rotary speed of the rotary drive in response to at least one of a temperature of the first substrate, a temperature of the viscous fluid, and a viscosity of the viscous fluid.

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16. (Twice Amended) The method according to claim 14, wherein the viscous fluid is a bonding material for bonding a second substrate to the first substrate, the method further comprising:

positioning the second substrate onto the layer of viscous fluid formed on the first substrate with a connecting means;

spinning off excess viscous fluid of the layer between the first substrate and the second substrate with a rotary centrifugal drive.

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18. (Twice Amended) The method according to claim 14, further comprising:

measuring the thickness of the layer; and

automatically adjusting deviations between the measured thickness of the layer and the predetermined thickness to within at least one tolerance.

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24. (Amended) An apparatus for applying a layer of a viscous fluid onto a first planar substrate, comprising:

a pump that pumps the viscous fluid;

a dosing arm, connected to the pump and positioned over the first substrate, that doses the first substrate with the viscous fluid and forms the layer on the first substrate;

a plate that supports the first substrate;

a rotary drive that rotates the plate;

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a controller that controls a thickness of the layer to a predetermined thickness by controlling at least one of the dosing pump, a position of the dosing arm, and a rotary (speed of the rotary drive in response to at least one of a temperature of the first substrate, a temperature of the viscous fluid, and a viscosity of the viscous fluid.

25. (Amended) The apparatus according to claim 24, further comprising:

at least one sensor that measures the thickness of the layer, wherein the controller controls at least one of the dosing pump, the position of the dosing arm, and the rotary speed of the rotary drive to automatically adjust deviations between the measured thickness of the layer and the predetermined thickness to within at least one tolerance.

26. (Amended) The apparatus according to claim 24, wherein the viscous fluid is a bonding material for bonding a second substrate to the first substrate, the apparatus further comprising:

a connecting means that positions the second substrate onto the layer of viscous fluid formed on the first substrate;

a rotary centrifugal drive that spins off excess viscous fluid of the layer between the first substrate and the second substrate.

27. (Amended) The apparatus according to claim 26, wherein the controller controls the thickness of the layer of viscous fluid by controlling at least one of a connecting pressure of the connecting means and a rotary speed of the rotary centrifugal drive.

Please add claim 28 as follows:

28. (New) The method according to claim 16, further comprising:

controlling the thickness of the layer of viscous fluid by controlling at least one of a connecting pressure of the connecting means and a rotary speed of the rotary centrifugal drive.